

## A Rare Case Of Brachial Plexus Neuritis In Children

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### INTRODUCTION:

Atraumatic brachial plexus neuropathy is rare. Although a viral etiology has been suggested, other research has shown that in up to 25% of cases, other various infections occur before acute brachial plexus neuritis manifests [1]. Diagnosing and treating a case of brachial plexus neuritis is a challenge due to most case presented at late presentation.

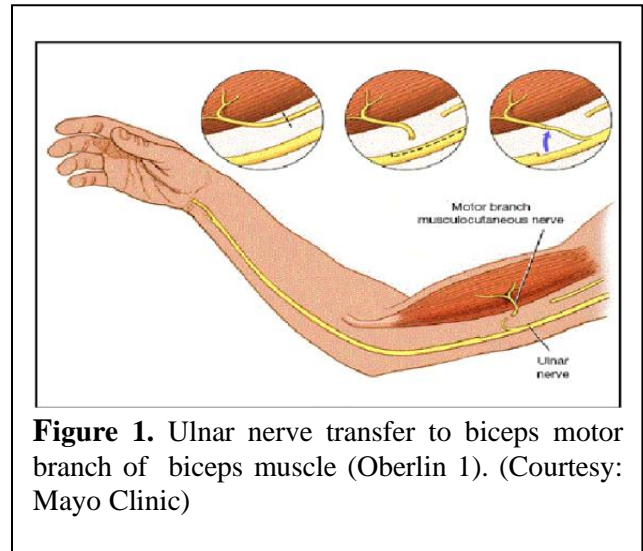
### REPORT:

1 year 4 months old girl, immunization up to age, was brought for medical attention by parent for lack of right shoulder and elbow motion. The child was presented late as the 1<sup>st</sup> manifestation started at 6 months of age following a viral infection (HFMD).

During presentation, there is no active shoulder range of motion and weak elbow flexion (MRC 1), while the joints are supple. Otherwise, good active wrist and fingers range of motion. Plain radiographs show no shoulder instability.

She is diagnosed with right brachial plexus neuritis proceed with neurotization: spinal accessory nerve to suprascapular nerve and Oberlin 1 (ulnar nerve to biceps branch) procedure. Post operatively underwent serial follow ups and rehabilitation programs.

Currently, she is already 5 years post surgery. On latest follow up, there is significant improvement of active shoulder and elbow motion with shoulder abduction and forward flexion up to 90°, and good elbow full range of motion (MRC 4). She able to do self care independently and also involves with activities such as climbing and trekking.



**Figure 1.** Ulnar nerve transfer to biceps motor branch of biceps muscle (Oberlin 1). (Courtesy: Mayo Clinic)

### CONCLUSION:

Brachial plexus neuritis is a self limiting disease. 63 % of total cases made a full recovery, and 13% no recovery [2]. Early referral and intervention are needed for a better prognostic outcome.

### REFERENCES:

1. Misamore GW et al. Parsonage-Turner syndrome (acute brachial neuritis). J Bone Joint Surg Am. 1996 Sep;78(9):1405-8.
2. Høst C, et al. Idiopathic neuralgic amyotrophy in children. Case report, 4 year follow up and review of the literature. Eur J Paediatr Neurol. 2010 Nov;14(6):467-73